

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/689,665	10/22/2003	Antero Laine	30-569	6493	
23117	7590 06/24/2004		EXAM	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD			ALVO, MARC S		
8TH FLOOR	E ROAD		ART UNIT	PAPER NUMBER	
ARLINGTON	, VA 22201-4714		1731		
			DATE MAILED: 06/24/2004	1	

Please find below and/or attached an Office communication concerning this application or proceeding.

			19
	Application No.	Applicant(s)	
	10/689,665	LAINE ET AL	
Office Action Summary	Examiner	Art Unit	
	Steve Alvo	1731	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet v	vith the correspondence addres	is
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a within the statutory minimum of th rill apply and will expire SIX (6) MC cause the application to become	a reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this commun ABANDONED (35 U.S.C. § 133).	nication.
Status			
1) Responsive to communication(s) filed on			
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	action is non-final.		
3) Since this application is in condition for allowant closed in accordance with the practice under <i>E</i>			rits is
Disposition of Claims			
4) ☐ Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-19 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or			
Application Papers			
9)☐ The specification is objected to by the Examiner			
10)☐ The drawing(s) filed on is/are: a)☐ acce	·		
Applicant may not request that any objection to the c		• • • • • • • • • • • • • • • • • • • •	
Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Example 11.	· ·	<b>-</b>	` '
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in a ity documents have bee (PCT Rule 17.2(a)).	Application No n received in this National Stag	j <b>e</b>
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10-2003.	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152) 	)

Application/Control Number:

10/689,665 Art Unit: 1731

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103 (a) as being unpatentable over REINHALL in view of IYENGAR and GERVASI.

REINHALL teaches treating low consistency pulp (column 2, lines 42-44) to a prethickener (10) where liquid is removed from the pulp (30) due to the feeding pressure in the container (column 3, lines 11-15), a layer of pulp is collected on the container walls (column 2, lines 49-50) and cleaned off by blades (40) which also move the pulp downward through the dewater (10) in an axial direction, see column 2, lines 49-53. REINHALL teaches regulating the flow with valves (52) and (68) and feed pump (48) prior to valve (52) as shown in Figure 1 and also with control means (34). REINHALL also controls the dewatering by changing the rotational speed of the blades using control means (44). It would have been especially obvious to use feed pressure to advance the pulp through the dewaterer of REINHALL as such is taught by IYENGAR. If necessary it would have been obvious to substitute the screw conveyor of ITENGGAR for the blades of REINHALL as the serve the same function of cleaning the pulp from the walls as the pulp is advanced in axial direction through the dewater. The screw conveyor of IYENGAR would function in the same manner as the instant screw conveyor as they are the same structurally. It would have been obvious that the low consistencies taught by REINHALL would be in the 3-5% range as such is taught by IYENGAR (column 1, lines 65-67). If necessary, it would have been especially obvious to control the thickness of the cake

10/689,665

Art Unit: 1731

(pulp) that builds up on the walls of REINHALL as GERVASI teaches the cake thickness on the walls of a filter reduces the filtration rate through the container walls (column 2, lines 28-35). The dewater functions in the same manner as the filter of GERVASI, e.g. removes liquid through the vessel walls and a cake (pulp) remins on the walls which is removed by blades. It would have been obvious to control the thickness of the pulp on the dewater walls of REINHALL to prevent a reduction in the dewatering rate through the walls as such is taught by GERVASI.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-91 97 (toll-free).

Steve Alvo

Primary Examiner Art Unit 1731